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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,963	12/17/2001	Addepalli Sateesh Kumar	RNI-001-2P	9463

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Raza Microelectronics, Inc  
Legal Department  
18920 Forge Drive  
Cupertino, CA 95014

EXAMINER

SHAND, ROBERTA A

ART UNIT PAPER NUMBER

2665

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/023,963

Applicant(s)

KUMAR ET AL.

Examiner

Roberta A. Shand

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-23 is/are allowed.
- 6) ☒ Claim(s) 1-13 and 24-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Specification***

1. Please provide the Serial Number of the co-pending Application cited on page 1, paragraph 3 and page 2, paragraphs 4-7.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-8 and 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linebarger (U.S. 6788666 B1) in view of Koonen (U.S. 6681083 B1).

5. Regarding claim 1, Linebarger teaches (fig. 1) a network comprising: a first network node having a first wireless interface and a second wireless interface; a second network node

Art Unit: 2665

having a third wireless interface coupled the to first wireless interface; and a third network node coupled to the first network node and the second network node.

6. Linebarger does not teach a ring network.

7. Koonen teaches (fig. 2) a ring network. It would have been obvious to one of ordinary skill in the art to adapt to Linebarger's system Koonen's ring network in order to obtaining a constant output power per node, and to allow a modular ONU design (col. 3, lines 25-32).

8. Regarding claim 2, Linebarger teaches (fig. 1) the third network node comprises a fourth wireless interface coupled to the second wireless interface.

9. Regarding claim 3, Linebarger teaches (fig. 1 and abstract) the third network node is connected to the second network node via one or more optical fibers.

10. Regarding claims 4 and 29, Linebarger teaches (fig. 1) a fourth network node coupled between the third and first network nodes.

11. Regarding claims 5 and 28, Linebarger teaches (abstract) the first wireless interface is RF.

12. Regarding claims 6 and 27, Linebarger teaches (fig. 1) the first wireless interface is a free space optics wireless interface.

Art Unit: 2665

13. Regarding claim 7, Linebarger teaches (abstract) the network is configured to transfer data via packets.

14. Regarding claim 8, Linebarger teaches (col. 4, lines 12-20) the first network node comprises a cross connect switch coupled to the first and second wireless interface.

15. Regarding claim 24, Linebarger teaches (col. 1, lines 25-32) the first wireless interface is part of a multi-medium network interface.

16. Regarding claim 25, Linebarger teaches (fig. 1) a network comprising: a first network node; a second network node coupled to the first by the first link having a first bandwidth; a third network node coupled to the second by a first wireless link having a second bandwidth; wherein the first bandwidth is not equal to the second bandwidth (fig. 4).

17. Linebarger does not teach a ring network.

18. Koonen teaches (fig. 2) a ring network. It would have been obvious to one of ordinary skill in the art to adapt to Linebarger's system Koonen's ring network in order to obtaining a constant output power per node, and to allow a modular ONU design (col. 3, lines 25-32).

19. Regarding claim 26, Linebarger teaches (fig. 1) the first wireless link is an optics wireless link.

Art Unit: 2665

20. Regarding claim 30, Linebarger teaches (fig. 1) the first link is an optical link and the second link is a wireless link.
21. Regarding claim 31, Linebarger teaches (fig. 1) data is transferred over the first link using a first protocol.
22. Regarding claim 32, Linebarger teaches (fig. 1) data is transferred over the first wireless link using a second protocol.
23. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linebarger in view of Koonen and in further view of Hamada (U.S. 6333916 B1).
24. Regarding claim 9, as mentioned above, Linebarger and Koonen teach all of the limitations of claim 8.
25. Linebarger and Koonen do not teach a TDM user interface.
26. Hamada teaches (fig. 1) a TDM user interface. It would have been obvious to one of ordinary skill in the art to adapt this to Linebarger and Koonen's system as it is well known in the art.

Art Unit: 2665

27. Regarding claim 10, Hamada teaches (fig. 5) a first TDM framer/deframer coupled to the first wireless interface and configured to deframe a first TDM frame from the first wireless interface; and a second TDM framer/deframer coupled to the second wireless interface and configured to form a second data frame.

28. Regarding claims 11 and 13, Linebarger teaches (col. 3, lines 9-17) the cross connect unit is packet/TDM configured to process TDM data and packet data.

29. Regarding claim 12, Linebarger teaches (fig. 1) the first network node comprises a packet user interface coupled to the cross connect switch and configured for packet based data.

30. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Linebarger and Koonen.

31. As mentioned above, Linebarger and Koonen teach all of the limitations of claim 26.

32. Linebarger and Koonen do not teach different bit error rate. However, since Linebarger teaches two different protocols, it is inherent that there will be two different bit error rates.

***Allowable Subject Matter***

33. Claims 14-23 are allowed.

***Conclusion***

**34. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

35. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

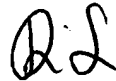
36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2665

38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roberta A Shand  
Examiner  
Art Unit 2665



STEVEN NGUYEN  
PRIMARY EXAMINER